MISSOULA FIRE WEATHER - 2017

Location

The National Weather Service Office in Missoula is located at the Missoula Fire, Science and Technology Center, 6633 Aviation Way, 1/4 mile west of the Missoula International Airport. The mailing address is:

National Weather Service 6633 Aviation Way Missoula, MT 59808

Phone Numbers

• Fire Weather desk: (406) 329-4716

• Office: (406) 329-4715/4840

• FAX: (406) 329-4842

Contacts

Administrative IMETs

Bruce Bauck
Meteorologist in Charge
bruce.bauck@noaa.gov

Jennifer Kitsmiller
Fire Wx Mgr
jennifer.kitsmiller@noaa.gov

Marty Whitmore WCM marty.whitmore@noaa.gov

Bob Nester Incident Meteorologist robert.nester@noaa.gov

Ryan Leach Incident Meteorologist ryan.leach@noaa.gov

Internet Address

http://weather.gov/missoula

Operational Hours

• Twenty-four hour service is provided for routine and special fire weather products.

TRAINING PROVIDED

Missoula Fire Weather Forecasters are available for training courses, workshops, seminars and other meetings requiring meteorological expertise. Training includes local and Regional courses such as S-290 and S-390, as well as pre-season refreshers for Hotshot crews, Smokejumpers, general firefighters, lookout personnel, etc. Please give as much advance notification as possible to ensure the availability of a forecaster.

All Training Requests should go through the Fire Weather Manager, Jennifer Kitsmiller.

e-mail <u>Jennifer.Kitsmiller@noaa.gov</u> and cc: Marty.Whitmore@noaa.gov

or

phone 406-329-4715

FIRE WEATHER BRIEFINGS

NWS Missoula produces recorded fire weather briefings for local land managers.

Recorded briefings will be posted Sundays and Thursdays by 3:00 pm MDT/2:00 pm PDT from the beginning of spring burning through the end of fall burning season, as user need dictates. During periods of slow prescribed burning or low fire activity, recorded briefings may be discontinued for a time until user need increases. Likewise, more frequent recordings may be produced during periods of increased wildfire activity. In addition, live calls may be initiated during periods of extreme fire weather conditions with multiple Incident Management Teams (IMTs) in place. These calls will typically take place in the morning and will be announced through the recorded briefing and email. Information for joining the live call follows.

Toll free number: 877-812-0276 Participant Passcode: 831268#

The recorded briefings will be posted on the fire weather webpage for at least 24 hours. A live link to the briefing will also be placed beneath the discussion in the fire weather forecast (FWF). Fire weather briefings are also archived on our YouTube channel (http://www.youtube.com/NWSMissoula).

Land managers are encouraged to call NWS Missoula regarding specific weather and/or recorded briefing questions at (406)-329-4716

SOCIAL MEDIA

NWS Missoula uses social media tools such as Twitter, Facebook and YouTube to engage the public and our partners in conversations about important weather, water, and climate issues, which at times may include information pertaining to fire weather. These tools will be used in addition to other sources already in use to inform the fire community of critical weather.

NWS Missoula primarily uses Facebook for longer lead times, often addressing potential weather impacts we are seeing several days in advance. Facebook posts may include

information on forecaster confidence. You can follow NWS Missoula on Facebook at https://www.facebook.com/NWSMissoula.

NWS Missoula primarily uses Twitter to discuss weather events happening in real time, or in the near future. The office may Tweet about current observations, changes being made to the forecast, timing weather events such as thunderstorms, etc. You can follow NWS Missoula on Twitter at https://www.twitter.com/NWSMissoula.

NWS Missoula has also acquired a channel on YouTube. Short informational videos, including fire weather briefings, will be posted at this site. You can follow NWS Missoula on YouTube at http://www.youtube.com/nwsmissoula.

NWS Missoula also uses email as a way to keep in touch with our fire weather partners. Emails may be used to notify about potentially significant fire weather events and will often be sent several days before traditional products such as watches or warnings would be issued. Emails may also be used to announce the start/end of the fire weather forecast, to advertise fire weather briefings (both live and recorded), and during the prescribed burning seasons to advertise potential burn windows. If you would like to be included on these emails, please send a message stating your name, agency and position to jennifer.kitsmiller@noaa.gov

AGENCIES SERVED

The National Weather Service Office in Missoula provides fire weather services to agencies in northwest Montana and west central Idaho. Agencies served include:

USDA Forest Service Region 1	Lolo NF, Kootenai NF, Flathead NF, Beaverhead/Deerlodge NF, Clearwater / Nezperce NF, Bitterroot NF, Northern Rockies Coordination Center (NRCC)
Bureau of Land Management	BLM-Idaho, BLM-Montana
Bureau of Indian Affairs	Nez Perce Tribe of Idaho, Confederated Salish and Kootenai Tribe
Fish & Wildlife Service	FWS-Montana, FWS-Idaho
National Park Service	Glacier NP, Yellowstone NP
State of Montana	Department of Natural Resources and Conservation
Counties (Montana)	Beaverhead, Deer Lodge, Flathead, Granite, Lake, Lincoln, Mineral, Missoula, Powell, Ravalli, Sanders, Silverbow, Glacier, Madison, Jefferson
State of Idaho	Idaho Department of Lands
Counties (Idaho)	Clearwater, Idaho, Lewis, Nez Perce, Latah

Fire Contacts

Western Region

Operations and Decision Support <u>Division</u>	Name	Number
Fire Weather Program Manager	Scott Carpenter	801-524-5120 ext. 245
	Claudia Bell	801-524-5137 ext. 233

USFS Forest Dispatch Center Managers

Forest	Phone
Dillon Interagency	406-683-3975
Bitterroot Dispatch	406-363-7133
Grangeville Interagency	208-983-6800
Kalispell Interagency	406-758-5260
Kootenai Interagency	406-283-7740
Missoula Interagency	406-829-7070
Plains Dispatch	406-826-3061
Ronan Dispatch	406-676-2550

USFS Forest/District Fire Management Officers

Forest	City/State	Phone
Beaverhead/Deerlodge	Dillon, MT	406-683-3990
Dillon District	Dillon, MT	406-683-3983
Wise River/Wisdom District	Wisdom, MT	406-689-3243

Madison District	Ennis, MT	406-682-4253
Jefferson/Butte District	Whitehall, MT	406-287-3223
Pintler District	Phillipsburg, MT	406-859-3211
<u>Bitterroot</u>	Hamilton, MT	406-363-7135
Stevensville District	Stevensville, MT	406-777-5461
Darby/Sula District	Darby, MT	406-821-4258
West Fork District	Darby, MT	406-821-1216
Clearwater/Nezperce	Grangeville, ID	208-983-4066
Clearwater NF		
Palouse District	Potlatch, ID	208-875-1702
North Fork District	Orofino, ID	208-476-8251
Lochsa District	Kooskia, ID	208-926-6419
Powell District	Powell, ID	208-942-0345
Nezperce NF		
Salmon River District	Slate Creek, ID	208-839-2141
Elk City/Red River District	Elk City, ID	208-842-2124
Moose Creek District	Fenn, ID	208-926-8948
Flathead	Kalispell, MT	406-758-5235
Swan Lake District	Big Fork , MT	406-837-7527
Hungry Horse/Glacier View District	Hungry Horse, MT	406-387-3834
Spotted Bear District	Hungry Horse, MT	406-758-6461 406-387-3832
Tally Lake District	Kalispell, MT	406-758-3522
Kootenai	Libby, MT	406-283-7740
Rexford District	Eureka, MT	406-296-7173
Fortine District	Fortine, MT	406-882-8328
Three Rivers District	Troy, MT	406-295-7486
Libby District	Libby, MT	406-293-7551
Cabinet District	Trout Creek, MT	406-827-0712
<u>Lolo</u>	Missoula, MT	406-329-1089
Missoula District	Missoula, MT	406-329-3852
Ninemile District	Huson, MT	406-626-5422
Seeley Lake District	Seeley Lake, MT	406-677-3915
Superior District	Superior, MT	406-822-3952

Plains/Thompson Falls District Plains, MT 406-826-4340

Agency	City/State	Phone
Idaho Department of Lands	Coeur d'Alene, ID	208-769-1525
Clearwater Supervisory Area	Orofino, ID	208-476-4587
Maggie Creek Supervisory Area	Kamiah, ID	208-935-2141
Craig Mountain Forest Protective District	Craigmont, ID	208-924-5571
Ponderosa Supervisory Area	Deary, ID	208-877-1121
Clearwater-Potlatch Timber Protective Association	Orofino, ID	208-476-5612
DNRC	Helena, MT	406-444-2074
Northwestern Land Office	Kalispell, MT	406-751-2240
Southwestern Land Office	Missoula, MT	406-542-4200
Central Land Office	Helena, MT	406-458-3500
Dillon Unit	Dillon, MT	406-683-6305
BLM Montana		
Missoula Field Office	Missoula, MT	406-329-3914
Dillon Field Office	Dillon, MT	406-683-8000
Butte Field Office	Butte, MT	406-533-7600
BLM Idaho		
Cottonwood Field Office	Cottonwood, ID	208-962-3245
National Parks Service		
Glacier National Park	West Glacier, MT	406-888-5803
Yellowstone National Park	WY	307-344-2180
Fish and Wildlife Service		
Lee Metcalf National Wildlife Refuge	Stevensville, MT	406-777-5552
National Bison Range	Moiese, MT	406-644-2211
Bureau of Indian Affairs		
Confederated Salish and Kootenai Tribe	Ronan, MT	406-676-2550
Nez Perce Tribe	Lapwai, ID	208-843-2827

Agency	Name	Phone
Northern Rockies Coordination Center		329-4880
(NRCC)		
Center Manager	Kathy Pipkin	329-4709
Assistant Center Manager	Judy Heinz	329-4708
Intelligence	Julie Polutnik	329-4885

Agency	Name	Phone		
Predictive Services				
Meteorologist	Michael Richmond	329-4703		
Meteorologist	Vacant	329-4875		
Smoke Coordinator/Fuels	Erin Law	406-214-7214		

ROUTINE PRODUCT ISSUANCE TIMES

General Forecast

April - June Daily Morning 0700 MDT July -Morning/ 0700/1500 Daily Afternoon September MDT Daily October -Mornings 0700 MDT November

Specific dates of the above timeframes will be dictated by user needs.

Fire Weather Briefings

Spring through Sundays and 1500 Fall Burning Thursdays MDT

Briefings will be provided as needed during periods of increased wildfire activity.

Specific dates of the above timeframes will be dictated by user needs.

National Fire Danger Rating System (NFDRS) Forecast Product

June - September Daily 1530 MDT

NWS Missoula will be testing a new 7 day NFDRS forecast this year. Traditional NFDRS forecasts only provide the forecast for one day, however the new format will supply forecast information out for seven days. The overall format will not change, however there will now be seven lines for each NFDRS site, representing each day of the seven day period. Below is an example of what the 7 day forecast will look like for one NFDRS site.

FCST,STATION#,YYMMDD,13,WX,TEMP,RH,LAL1,LAL2,WIND,,TX,TN,RHx,RHn,PD1,PD2,WETFLAG

```
FCST,101100,160224,13,2,53,39,1,1,07,,53,31,66,31,0,0,N

FCST,101100,160225,13,2,56,38,1,1,05,,56,35,61,33,0,0,N

FCST,101100,160226,13,1,57,46,1,1,04,,59,39,61,32,0,0,N

FCST,101100,160227,13,2,56,50,1,1,06,,60,40,84,42,0,2,N

FCST,101100,160228,13,2,56,53,1,1,05,,58,40,85,42,3,1,N

FCST,101100,160229,13,2,54,52,1,1,01,,59,42,83,46,3,2,N

FCST,101100,160301,13,2,51,53,1,1,02,,56,32,93,45,3,1,N
```

If you have any questions regarding this test, please feel free to contact Jenn Kitsmiller at Jennifer.Kitsmiller@noaa.gov

FIRE WEATHER PLANNING FORECAST EXAMPLE

ZCZC GTFFWFMSO FNUS55 KMSO 101059

Fire Weather Planning Forecast for Wrn Montana and N Cntrl Idaho National Weather Service Missoula MT $459~\mathrm{AM}$ MDT Fri Aug 10~2013

... Headline as Necessary...

DISCUSSION...

Idaho: This would be a short, non-technical description of the weather pattern and features over the next couple days in Idaho. It will focus on the main weather concerns in the short term.

Montana: This would be a short, non-technical description of the weather pattern and features over the next couple days in Montana. It will focus on the main weather concerns in the short term.

Extended...Occasionally the discussion may include information on the medium range(days 3-7). In these cases, a separate labeled paragraph like this will be added.

When a recorded briefing is available, a live link will be placed at the end of the discussion.

MTZ104-105-111345-Kootenai-Flathead/Glacier Park-459 AM MDT Fri Aug 10 2013

... Red Flag Warning in Effect From Noon Today to 9 PM MDT This Evening...

```
.Today...
 * Sky/Weather......Partly sunny. Areas of smoke. Isolated showers
  and thunderstorms this morning.
 * Max Temperature.....77-83 valleys and 63-71 ridges.
 * Min Humidity.....24-34 percent.
 * 20-Foot winds.....
      Lower Elevation.....Variable less than 7 mph becoming southwest
                          15-25 mph with higher gusts in the late
                          morning and afternoon.
      Ridge Top.....West 15-25 mph with higher gusts.
* Haines Index.....3 Very Low.
 * LAL....2.
* CWR (> 0.10 Inch)...10 Percent.
 .Tonight...
 * Sky/Weather......Partly cloudy. Areas of smoke.
 * Min Temperature....42-50.
 * Max Humidity........80-90 percent valleys and 61-71 percent ridges.
 * 20-Foot winds.....
      Lower Elevation.....Southwest 15-25 mph becoming west 5-10 mph
                          in the late evening and early morning...
                          then becoming downslope/downvalley 5-10 mph
                          early in the morning.
      Ridge Top......West 15-25 mph decreasing to 10-15 mph
                          after midnight.
* Haines Index.....2 very low.
* CWR (> 0.10 Inch)...0 Percent.
 .Saturday...
 * Sky/Weather......Mostly sunny. Areas of smoke in the morning.
 * Max Temperature.....82-89 valleys and 72-77 ridges.
* Min Humidity.....19-29 percent.
 * 20-Foot Winds.....
      Lover Elevation.....Upslope/Upvalley 2-4 mph becoming south
                          5-10 mph in the afternoon.
      Ridge Top.....South 5-15 mph.
* Haines Index.....4 Low.
* CWR (> 0.10 Inch)...0 Percent.
 .Sunday...Partly cloudy. Lows 48-58. Highs 77-87. West winds to 10-15 mph.
 .Monday...Partly cloudy. Lows 49-59. Highs 80-90. Southwest winds
 5-10 \text{ mph.}
 .Tuesday...Partly cloudy. Lows 50-60. Highs 85-95. Diurnal
terrain winds to 10 mph.
 .Wednesday...Partly cloudy. Slight chance of showers and thunderstorms.
Lows 51-61. Highs 87-97.
 .Thursday...Mostly cloudy. Slight chance of showers and thunderstorms.
Lows 51-61. Highs 80-90.
$$
Forecast for next geographical descriptor and fire weather zone
group.
$$
```

RED FLAG CRITERIA

One or more of the following conditions, in conjunction with Very High or Extreme Fire Dangers, will be considered for Red Flag events.

- 1. Increasing thunderstorm activity (scattered or widespread coverage).
- 2. A combination of low RH's and increasing surface winds. See the Red Flag Decision Chart below.

RED FLAG DECISION CHART

Missoula's Fire Weather Forecasters utilize a Red Flag Decision Chart as a "first look" at the need for a Red Flag Warning, based on increasing wind and low RH. Typically Red Flag Warnings are issued when fire danger is rated "VERY HIGH" or greater. However, there may be exceptions. This chart is by no means an absolute.

Winds are sustained 10-minute average (RAWS).

Winds/RH Category

RELATIVE HUMIDITY

35% 30% 25% 20% 15% 10% 5%



Expected over a significant portion of the zone for 2 or more consecutive hours.

Poss = Possible

FORECAST ZONE DESCRIPTIONS

ZONE 102: PALOUSE/NEZ PERCE RESERVATION/HELL'S CANYON REGION

The northern boundary follows the southern portion of the Coeur d'Alene Indian Reservation and the Latah/Clearwater County lines. The eastern boundary originates at the intersection of the Little North Fork of the Clearwater (near the Clearwater County line) and the Clearwater/Nezperce National Forest boundary and runs south along the Forest boundary past Grangeville to the main Salmon River at Island Bar and continues south and west along the Idaho County border. The western boundary runs along the Snake River from the Coeur d'Alene Reservation to the Adams County line.

ZONE 103: CLEARWATER/NEZ PERCE NATIONAL FOREST

This zone encompasses the entire combined Clearwater and Nezperce National Forests as well as the Gospel Hump and portions of the Selway Bitterroot Wilderness. Also included is the Floodwood State Forest in the vicinity of the Little North Fork of the Clearwater at the northern border of Clearwater County.

ZONE 104: KOOTENAI NATIONAL FOREST/TALLEY LAKE DISTRICT (FNF)

The western and northern boundaries follow political lines along the Idaho-Montana and Canadian borders. The eastern boundary follows the Kootenai National Forest boundary south to route 93 to the Flathead National Forest boundary, north of Whitefish, east of Columbia Falls and heading south along the Forest boundary to the Lake County line. The southern boundary follows the Lake County line and Flathead National Forest boundary to the intersection of route 2 which continues south along Forest boundaries to the State border. The State protected lands on the Fisher River District are also included within this zone.

ZONE FLATHEAD NATIONAL FOREST/GLACIER PARK/BOB MARSHALL AND MISSION MOUNTAIN 105: WILDERNESS

This zone starts at the intersection of the Kootenai/Flathead National Forests at the Canadian border running east and including Glacier National Park. The eastern boundary follows the Park border and intersects with the Continental Divide and runs south to the Flathead National Forest boundary. The southern boundary borders the Bob Marshall and Mission Mountain Wilderness lines. The western boundary follows the Mission Mountains and Swan range along the Forest boundary to north of Whitefish and west to route 93 to the Kootenai/Flathead National Forest boundary. This zone includes the Stillwater State Forest.

ZONE 106: WESTERN LOLO NATIONAL FOREST

This zone includes the Nine Mile, Superior, Plains/Thompson Falls and western portions of the Missoula District on the Lolo National Forest. It is bounded by the Idaho-Montana border (Bitterroot Mountains) and extends northeast along the Kootenai/Lolo National Forest boundary. Moving south, this zone follows the Salish & Kootenai Indian Reservation and Lolo National Forest interface to west of Evaro tracing the Forest boundary to Huson. Crossing I-

90, this zone continues south along the Forest boundary until the intersection of route 12 and continues southwestward to the State border.

ZONE 107: SALISH & KOOTENAI INDIAN RESERVATION

This zone is bounded by the Lolo National Forest on the west and south and the Flathead National Forest on the east and north.

ZONE 108: EASTERN LOLO NATIONAL FOREST /WELCOME CREEK AND SCAPEGOAT WILDERNESSES

This zone includes all of the Lolo National Forest east of Missoula and south of route 12, up to the Bitterroot National Forest boundary. It also contains the Scapegoat and most of the Welcome Creek Wildernesses. The eastern boundary starts at the tri-section of the Bob Marshall Wilderness, Continental Divide and Scapegoat Wilderness and continues southeast to the Wilderness/Lincoln District boundary. This line continues south along the Helena National Forest boundary to the intersection with the Deerlodge/Beaverhead National Forest. The southern boundary runs west from this boundary to Deer Lodge then north along Interstate 90 to the intersection with the Philipsburg District line. State protection areas include Missoula, Clearwater, Garrison, and Anaconda.

ZONE 109: BITTERROOT NATIONAL FOREST

This zone includes the entire Bitterroot National Forest (in both Idaho and Montana) as well as the Frank Church River of No Return Wilderness and portions of the Selway-Bitterroot Wilderness. The Stevensville District represents the northern boundary for this zone which is approximately along the Ravalli County line.

ZONE 110: DEERLODGE/ WESTERN BEAVERHEAD NATIONAL FOREST

The western boundary runs between Lemhi Pass northward along the Idaho-Montana border to the intersection of the Ravalli and Beaverhead County lines. This boundary continues along the Forest boundary via the Anaconda-Pintlar range and Sapphire Divide past Skalkaho Pass and across Rock Creek into the Welcome Creek Wilderness. This boundary cuts north across the John Long Mountains and intersects with Interstate 90. This zone includes the easternmost section of this wilderness area (Lolo National Forest) which is managed by the Philipsburg District. The northern border follows Interstate 90 to Deerlodge, cuts east and runs along the Forest boundary, across the divide, and intersects with Interstate 15. The eastern boundary runs southerly and follows Interstate 15 through Butte and Dillon then along Route 41 to Clark Canyon Reservoir. The southern boundary extends west along Horse Prairie Creek to Lemhi Pass.

ZONE 111: EASTERN BEAVERHEAD NATIONAL FOREST

The southern boundary follows the Idaho-Montana border from Lemhi Pass along the Continental Divide (Centennial Mountains included) to Reynolds Pass. The eastern zone line continues along the Beaverhead/Gallatin National Forest boundary to north of Ennis where the Gallatin boundary intersects the Madison County line. The zone then follows the Madison County line to east of Whitehall and along the Deerlodge/Helena Forest boundary until Interstate 15 is intersected. The west boundary is identical to the east boundary of the Deerlodge/western Beaverhead National Forest zone.

WEATHER STATIONS

Zone	Station	WIMS#	County	Lat	Long	Elev	Site	Aspect	NFDRS
102	Potlatch Potlatch	100603	Latah	46:93	116:91	2500	Valley	Flat	X
102	<u>Dent</u>	100714	Clearwater	46:62	116:22	1700	Valley	S	X
102	<u>Pierce</u>	100711	Clearwater	46:50	115:80	3085	Valley	Е	X
102	Slate Creek	101037	Idaho	45:63	116:28	1568	Valley	W	X
102	Pittsburg Lndg	101100	Idaho	45:63	116:46	1357	Valley	Е	X
102	Shock	100606	Latah	46:98	116:62	3700	Ridge	S	X
103	Kelly Creek	100708	Clearwater	46:72	115:26	2739	Valley	S	X
103	Powell	101031	Idaho	46:51	114:69	3666	Valley	S	X
103	<u>Fenn</u>	101013	Idaho	46:10	115:55	1520	Valley	SW	X
103	Moose Creek	101028	Idaho	46:13	114:92	2460	Valley	Flat	X
103	Red River	101045	Idaho	45:71	115:33	4600	Slope	S	X
103	Round Top	101049	Idaho	46:53	114:59	6560	Ridge	Flat	
103	Tess Portable	100791	Idaho	46:03	116:33	3461	Valley	Flat	
104	Libby	240107	Lincoln	48:38	115:57	2070	Valley	Flat	X
104	<u>Eureka</u>	240110	Lincoln	48:90	115:06	2632	Valley	Flat	X
104	Troy	240112	Lincoln	48:47	115:92	1950	Valley	Flat	X
104	BC Baldy	240119	Lincoln	48:63	115:58	4300	Slope	SW	X
104	Trout Creek	241210	Sanders	47:87	115:62	2379	Valley	Flat	X
104	<u>Boorman</u>	240226	Flathead	48.14	114.72	3963	Valley	Flat	
104	Fisher River	240118	Lincoln	48.36	115.32	2160	Valley	S	
104	<u>Yaak</u>	240120	Lincoln	48:92	115:66	3000	Valley	Flat	X
105	Spotted Br RS	240214	Flathead	47:92	113:52	3725	Valley	S	X
105	Hungry Horse	240217	Flathead	48:38	114:06	3123	Valley	S	X
105	<u>Hornet</u>	240224	Flathead	48:88	114:51	6500	Ridge	N	X
105	Condon WC	241502	Missoula	47:54	113:72	3684	Slope	S	X
105	Pony Creek	241512	Flathead	47:63	113:69	5510			
105	Big Prairie QD	241596	Flathead	47:51	113:24	4639			X
105	Fielding	240225	Flathead	48:28	113:43	4641	Valley	Flat	
105	Spotted Bear LO	240213	Flathead	47:90	113:44	7225	Ridge	W	X
112	Deep Creek	240308	Glacier	48:36	113:11	5340	Ridge	S	
105	St. Mary	240303	Glacier	48:74	113:43	4560	Valley	Flat	
105	West Glacier	240207	Flathead	48:51	113:99	3165	Valley	Flat	X

Zone	Station	WIMS #	County	Lat	Long	Elev	Site	Aspect	NFDRS
105	<u>Polebridge</u>	240210	Flathead	48:78	114:28	3574	Valley	Flat	X
105	<u>Stillwater</u>	240221	Flathead	48:54	114:56	3116	Valley	S	X
106	Lolo Portable 1		Mineral	46:78	114.64	6300			
106	Thompson Falls	241213	Sanders	47:58	115:28	2426	Valley	S	X
106	St. Regis	241302	Mineral	47:31	115:11	2678	Valley	S	X
106	Nine Mile	241507	Missoula	47:07	114:40	3314	Valley	SW	X
106	<u>Pardee</u>	241308	Mineral	47:27	114:92	4569	Slope	SW	X
106	<u>Plains</u>	241206	Sanders	47:47	114:88	2481	Valley	S	X
107	Hot Springs	241211	Sanders	47:61	114:67	2960	Valley	SW	X
107	<u>Jette</u>	241404	Lake	47:76	114:23	3593	Slope	Flat	
107	Ronan	241403	Lake	47:54	114:10	3234	Valley	Flat	X
108	Seeley Lake	241508	Missoula	47:18	113:44	4130	Valley	W	X
108	Blue Mountain	241513	Missoula	46:82	114:10	3412	Valley	Flat	X
108	Stinkwater	241518	Missoula	46:85	113:38	5443	Ridge	NE	X
108	Point Six	241519	Missoula	47:04	113:98	7897	Ridge	S	X
108	Garrison*	243108	Powell	46.54	112.74	4520	Slope	E	X
108	Saddle Mtn*	243104	Powell	46.68	113.01	6814	Ridge	Flat	X
108	Clearwater	241520	Missoula	47.01	113.33	3900	Valley	S	X
108	Finney's Meadow	241595	Missoula	47.05	114.11	4441	Valley		X
109	Hells Half	101019	Idaho	45:65	114:63	8100	Ridge	SW	X
109	Deer Mtn	242902	Ravalli	46:03	114:06	7282	Ridge	S	X
109	Gird Point	242911	Ravalli	46:19	113:92	6950	Slope	S	X
109	West Fork	242907	Ravalli	45:82	114:26	4420	Ridge	SW	X
109	Tepee Point	242910	Ravalli	45:93	113:74	6629	Ridge	SW	X
109	Stevensville	242904	Ravalli	46:51	114:09	3365	Valley	SW	X
109	Little Rock Cr	242914	Ravalli	46:04	114:26	5507	Slope	Е	X
109	Smith Creek	242912	Ravalli	46:44	114:23	5650	Slope	SE	X
109	<u>Sula</u>	242905	Ravalli	45.82	113.95	4570			X
109	Darby*	242901	Ravalli	46.03	114.17	3887	Valley	SW	X
110	Anaconda*	244402	Deer Lodge	46.10	113.10	6000	Valley	Flat	X
110	Phillipsburg	243002	Granite	46:32	113:30	5280	Slope	W	X
110	French Creek	245415	Beaverhead	45:33	112:91	7422			X
110	Wise River	245405	Beaverhead	45:78	112:93	5704	Slope	N	Х

Zone	Station	WIMS#	County	Lat	Long	Elev	Site	Aspect	NFDRS
110	Steele Creek	245417	Beaverhead	45:60	113:35	6405			X
111	<u>Brenner</u>	245409	Beaverhead	44:96	113:21	6631	Slope	Flat	X
111	Red Rock	245410	Beaverhead	44:68	111:83	6690	Valley	SW	X
111	<u>Antelope</u>	245412	Beaverhead	44:69	112:54	6795	Ridge	NE	X
111	<u>Harkness</u>	245416	Beaverhead	44:47	112:95	8400			X
111	<u>Ennis</u>	245501	Madison	45:35	111:73	5202	Valley	Flat	X
111	Burnt Creek	245506	Madison	44:95	111:96	6954			X
111	Jefferson/Whitehall	243204	Jefferson	45:88	112:15	4390	Valley	Flat	X
111	<u>Galena</u>	243206	Jefferson	46:22	112:23	6545	Ridge	Flat	X

^{*} Denotes once-a-day manual observations. These sites are not on the Observation Page but are available through WIMS.

FIRE WEATHER DISTRICT

The Missoula Fire Weather District includes zones 102 through 111 in north-central Idaho and western Montana. See map below.

